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ILLINOIS

Federal Aid Project No. W-49-R-33

Study XV: Wildlife Harvests

Job No. 2: Fur harvest survey, 1985-86

By

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ILLINOIS DEPARTMENT OF CONSERVATION

8 September 1986

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JOB COMPLETION REPORT

SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT NO. W-49-R-33

STUDY XV: Wildlife Harvests

Job No. 2: Fur harvest survey, 1985-86

ABSTRACT:

The Illinois Department of Conservation licensed 223 individual fur buyers (206 residents; 17 non-residents) during 1985-86, a 2.2% decrease from 1984-85. The number of trapping licenses issued was estimated at 9,547, down 20.5%. The estimated number of raccoon hunters decreased 18.0% to 33,348.

Reports required of all licensed fur buyers were used to determine the annual furbearer harvest and its value to fur-takers during the 1985-86 season. Based on a 96.86% response from individual buyers, the total harvest of the 10 open season furbearers was estimated at 423,538 pelts, a decrease of 25.1% from 1984-85. Total value of the harvest decreased 40.6% to \$3,685,859.80. Muskrats (Ondatra zibethicus) and raccoons (Procyon lotor) were the two most important species accounting for 88.84% of the total pelt harvest and 88.76% of its value. The harvest of two species increased and eight decreased compared with the previous season. The harvest fluctuation for striped skunk (Mephitis mephitis) may have been influenced by a population change. Other harvest changes, except for beaver (Castor canadensis), seemed to be the result of a reduction in the number of fur-takers, unfavorable trapping and night-hunting conditions during the early part of the season, and a continued decline in pelt prices.

The following table summarizes the 1985-86 statewide harvest:

Species	Estimated harvest	Average pelt price per pelt	Estimated total value to fur-takers
Muskrat	170,025	\$2.50	\$ 425,062.50
Mink	10,021	\$14.70	\$ 147,308.70
Raccoon	206,278	\$13.80	\$ 2,846,636.40
Opossum	17,633	\$0.95	\$ 16,731.35
Red fox	6,240	\$17.55	\$ 109,512.00
Gray fox	2,757	\$16.15	\$ 44,525.55
Beaver	3,857	\$9.45	\$ 36,448.65
Striped skunk	358	\$2.50	\$ 895.00
Weasel	22	\$0.45	\$ 9.90
Coyote	<u>6,347</u>	<u>\$9.25</u>	<u>\$ 58,709.95</u>
Totals or mean	423,538	\bar{x} = \$8.70	\$ 3,685,859.80

JOB COMPLETION REPORT

SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT NO. W-49-R-33

STUDY XV: Wildlife Harvests

JOB NO. 2: Fur harvest survey, 1985-86

OBJECTIVE:

To collect information on the annual fur-taker harvest of all open season furbearers in Illinois and its economic value.

PROCEDURES:

Numbers of wild fur pelts taken in Illinois and sold by fur-takers during the 1985-86 season were estimated from fur purchase reports required of all fur buyers licensed by the Department of Conservation (Fig. 1). Approximately 15 days before the muskrat trapping season opened, all buyers were mailed fur purchase report forms and written instructions to maintain records of their transactions throughout the season. The reports of raw furs purchased were to be submitted no later than 20 March 1986. Buyers failing to report by that date were mailed a reminder notice by 1st class mail on 15 April 1986. Only original pelt sales were used to avoid duplication. An adjustment factor of 4.0% was used to account for out-of-state pelt sales (Hubert 1986a). Average pelt prices for all sizes and grades were estimated from price data supplied by representative buyers during and after the open seasons. Numbers and distribution of fur buyer permittees and trapping pressure were determined from license sales records obtained from the License and Regi-Title office, Illinois Department of Conservation. Fur hunting pressure was estimated from the number of raccoon, red fox (Vulpes vulpes), and coyote (Canis latrans) hunters in the post-season hunter harvest survey, Federal Aid Project W-49-R-33, Study XV, Job No. 1.

Information about the history of striped skunk harvest regulations was obtained from official Department of Conservation files. These records were supplemented by a review of the published Illinois Revised Statutes and Laws at the University of Illinois library. In addition, pertinent Department of Conservation publications were examined.

FINDINGS AND ANALYSIS:

1985-86 Fur Seasons

The 1985-86 fur-bearing mammal season varied from 35 to 365 days in length (Table 1). Trapping seasons for all species except beaver, red fox, gray fox (Urocyon cinereoargenteus), and coyote lasted 47 days in the northern management

zone and 45 days in the southern management zone (Fig. 2). Opening dates were 13 November 1985 and 25 November 1985, respectively. Red fox, gray fox, and coyote could be legally trapped for 35 days in the northern zone and 45 days in the southern zone starting 25 November 1985. Beaver trapping season was 96 or 108 days in length depending on zone and opened simultaneously with all other species except fox and coyote. A 58-day hunting season was in effect for raccoon and opossum (*Didelphis marsupialis*); opening dates varied by zone. The statewide hunting season lasted 65 days for fox, 359 days for striped skunk, and 365 days for coyote. No bag limits were in force for any furbearer.

The weather during the month of November was poor to fair for fur-taking. Although the statewide average monthly temperature was less than one degree below normal, much variation occurred around the state. Temperatures ranged from 9 degrees C above normal in the southern zone to 9 degrees C below normal in the northern zone. A cool period, which started during the last week of October and continued into the second week of November when the northern zone seasons opened, dropped maximum readings into the 4 to 16 degree C range. Lows were between 0 and 4 degrees C. During the third week, temperatures again climbed above normal for a short time. However, by the fourth week when the southern zone seasons commenced, they had dropped below normal in many areas as maximum readings were only slightly above freezing (0 degrees C). Monthly precipitation averaged over 16 cm above normal. The northern third of Illinois received the least amount of rain (10-13 cm above the norm); the largest above normal variation was in the southeast section (20 cm above normal). Scattered rainfall occurred during every week of November. Many localities reported 5 to 7.5 cm of rain during a 24-hour period. As a result, several sections received record rainfall amounts for the month causing most streams to rise. Flooding problems were common. Two snowstorms also hit the northern part of the state during the third and fourth weeks of the month. The above weather conditions greatly hampered fur hunters and trappers, especially in the northern zone. High water was the major problem, but below-normal temperatures and some snow made the situation worse in the north. The overall catch was well-below to below average. Trappers appeared to be more adversely affected by the weather than hunters did.

Conditions for fur-taking improved during December, but remained less than good. Many trappers had discontinued their activities for the season due to high water levels, and the success of night hunters was reduced by cold and snowy weather. Average temperatures for the month ranged from 3 to 9 degrees C below normal. The cool period which started during the last week of November continued throughout December with only two brief warmups. There were three extremely cold periods, and during each of these, the departures ran from 11 to 14 degrees C below normal. Minimum readings fell to as low as -26 degrees C. Two warm periods (one during the second week and the other during the fourth week) sent maximum readings above 4 degrees C. Monthly precipitation averaged just under one cm above normal. The northern two-thirds of Illinois received above normal precipitation, but the southern one-third was below normal. Precipitation was recorded during every week in many sections. The northern zone received the greatest amounts of snow ranging from 5 to 43 cm; 2.5 to 23 cm fell on the remainder of the state. The heaviest snow occurred on the 10th and 11th and again during the third week. Once again, the overall fur harvest was below average, and trappers seemed to be affected more than hunters. The two warm periods temporarily enhanced night-hunting conditions and the cold and snow improved fox and coyote hunting conditions to near average for the month.

The weather in January was fair to good for fur-taking. Average monthly temperatures ranged for 1 to 3 degrees C above normal. The month started with a 4-day warm period with maximum temperatures exceeding 4 degrees C in many areas. Extremely cold air traveled southward across the state during the second week dropping the minimum readings to as low as -29 degrees C in the northwest. However, by the end of the second week, readings were once again above normal. Mid-month departures ran from 6 to 11 degrees C above normal as highs above 4 degrees C and 15 degrees C were recorded in the north and south, respectively. On the 26th and 27th a brief cold period sent minimum readings below -18 degrees C over the northern two-thirds of the state, but by month's end temperatures were once again above normal. Precipitation averaged 5 cm below normal for the state. The largest below normal variation was in the southeast section (7.3 cm below normal). This was one of the driest Januarys on record for Illinois. Five to 28 cm of snow fell across the northern one-third of the state during January; the southern two-thirds recorded from a trace to 2.5 cm. The heaviest snow occurred during the first and third weeks. Antioch received the greatest total snowfall (29 cm). Trappers and night hunters who remained active late into the seasons enjoyed brief periods of success when the temperatures were above freezing. In contrast, the cold and snow resulted in fairly typical canid hunting conditions and success. The January fur catch was not, however, large enough to push the season harvest totals to average levels for most species.

The weather during the 1985-86 season can be summarized as well-below to below average for water trapping, below average to average for land trapping and night hunting, and average for canid hunting. Adverse trapping conditions were widespread during the early part of the season when the majority of the fur harvest occurs. Many water trappers failed to start or ceased operations due to the high water levels on most streams. Night hunters and land trappers were impacted to a lesser extent, especially in the southern zone where temperatures were above normal in November and warm periods occurred in December. Canid hunters, on the other hand, enjoyed suitable harvest conditions over a longer period due to cold temperatures and widespread snow, particularly in December in the northern zone. The overall muskrat, mink (Mustela vison), raccoon, and opossum catch by trappers was likely reduced by the weather. To a lesser extent the take of raccoons and opossums by night hunters and canids by land trappers was also reduced. In comparison, fox and coyote hunters recorded a more typical harvest, especially for coyotes. The brief warm periods and more stable water levels in December through February apparently permitted beaver trappers to operate with above average success.

Trends in Fur License Sales

Records of fur buyer permits sold by the Commercial Permit office, Illinois Department of Conservation, for 1985-86 were compiled prior to mailing out fur purchase report forms and instructions. A total of 223 individuals purchased 226 fur buyer permits during 1985-86. This represents a 2.2% decrease from 1984-85 in the number of persons licensed. Of the 223 buyers, 206 were residents and 17 were non-residents. The 206 residents bought 209 permits (Table 2). Almost 68% of all resident buyers were headquartered in the Northwest Hills, Western Prairie/Forest, Grand Prairie, and Southern Plain wildlife management units (Table 2, Fig. 3). Fur buyer distribution within the state is not indicative of furbearer or fur harvest distribution.

Trapping licenses issued statewide in 1985-86 numbered approximately 9,547 (9,537 resident, 10 non-resident - 1 July 1986 estimate), a decrease of 20.5% from the previous year (1984-85 revised estimate of trapping license sales = 12,002). The decrease occurred throughout the state and was not confined to specific management units. The decline may have been due in part to pre-season predictions of lower fur prices and the adverse weather conditions at the beginning of the season. Raccoon hunter numbers decreased 18.0% from an estimated 40,678 in 1984-85 to 33,348 in 1985-86 (Ellis 1986). Part of the change is likely due to sampling variation, but poor weather for night hunting may have reduced activity in certain areas. As in earlier seasons, most of the night hunters were in the northern, western, and southern management units (Fig. 3). The number of red fox hunters decreased 15.8% to an estimated 14,795, and the estimated number of coyote hunters dropped 4.2% to 30,604 (Ellis 1986). Both declines may be attributed to predictions of lower fur prices coupled with a lack of suitable tracking snow due to periodic warm-ups, especially during January. Opossum hunters were estimated to number 9,963 or 29.8% fewer than the previous season (Ellis 1986).

Fur Buyer Fur Purchase Survey

Reports of raw furs purchased had been submitted by 216 of the 223 (96.86%) individual fur buyers when the survey was closed out on 15 June 1986. Of these, 31 stated they did not buy any pelts during the 1985-86 season. The seven buyers who failed to report were assumed to have purchased raw furs at the same rate as the buyers who submitted records of their activities.

An estimated total of 423,538 pelts was harvested and sold by Illinois fur-takers during the 1985-86 season (Table 3). This estimate includes an adjustment factor of 4.0% to account for out-of-state pelt sales (Hubert 1986a). No allowance was made for pelts harvested by hunters and trappers that were not sold.

Muskrats and raccoons were the two most important furbearers in terms of harvest and value (Table 3). Together these species accounted for 88.84% of the total pelt harvest and 88.76% of its value. Other top-ranking species included mink, opossum, red fox, and coyote. The 1985-86 pelt harvest was valued to fur-takers at \$3,685,859.80, about \$2,515,679 less than the previous year (Table 4).

The total fur harvest for 1985-86 represented a 25.1% decrease in pelts taken compared with the 1984-85 season (Table 4). All changes were influenced by the decrease in allowance for out-of-state pelt sales in 1985-86. Also, as noted above, fewer trapping licenses were sold and the number of fur hunters decreased.

A major increase (>25%) in the striped skunk harvest occurred compared with the previous season. This increase appears to be the result of sampling variation. However, Hubert (1986d) reported a substantial increase in the autumn 1985 statewide skunk population.

The beaver harvest remained stable (<5% change) from 1984-85 to 1985-86 (Table 4). The estimated number of successful beaver trappers was almost 25% lower in 1985-86 compared with the previous year (Hubert 1986a), but the harvest was constant. Apparently the beaver catch failed to fluctuate because the average pelt price as well as trapper success increased (Table 4, Hubert 1986a). Also,

trappers sold a slightly higher percentage of the beaver pelts they caught in 1985-86 than they did in 1984-85 (Hubert 1985a, 1986a).

Minor drops (5 to 25%) in the muskrat, raccoon, and coyote harvests were recorded in 1985-86 (Table 4). A decline in pelt price may have been a factor for the first two species, but the average value of coyote pelts was higher in 1985-86. Census data are not available for muskrats. However, field observations indicated the 1985 statewide muskrat population was as high as in 1984 (Hubert, unpublished data). Raccoon numbers were up from the previous year; Hubert (1986b) reported a 13.6% increase in raccoon sightings during the 1986 statewide spring spotlight census. In addition, a population decline can probably be ruled out for coyotes since trend data based on sightings by successful deer hunters indicate coyote numbers were stable from 1980 through 1985 (Hubert, unpublished data). The probable causes for the harvest declines recorded include the drop in hunter and trapper numbers and below average harvest conditions, especially for water trapping and night hunting.

Major declines (>25%) in the mink, opossum, red fox, gray fox, and weasel (*Mustela frenata*, *M. nivalis*) harvests took place compared with the previous season (Table 4). Pelt value drops may have affected the mink and fox catches, but were obviously not involved in the opossum and weasel harvests. Population trend data for foxes are limited, but a drop in fox numbers between years appears unlikely. The average catch per successful trapper for both red and gray foxes was higher in 1985-86 than in 1984-85 (Hubert 1985a, 1986a). Based on road-kill data, the opossum population was almost 6% higher in 1985 compared with 1984 (Hubert 1986c). The 1985 statewide mink population may have been lower in 1985-86, but supportive data are not available. The reduction in hunter and trapper numbers noted above combined with below average harvest conditions, particularly for water trapping and night hunting, are the most likely reasons for the reduced harvests of these species in 1985-86. The change in weasel harvest from year to year is not meaningful because only a small number of weasels are trapped annually. Most weasels are taken incidentally to other species.

The total value of the 1985-86 fur harvest was \$2,515,679.15 (40.6%) less than the previous season (Table 4). The change was due to a combination of a decrease in total pelt harvest (especially for muskrat, mink, raccoon, and red fox) and a decrease in the average prices paid (especially for muskrat, raccoon, red fox, and gray fox). The average pelt prices for 6 of the 10 species surveyed decreased compared with a year earlier, and the overall average pelt price declined from \$10.95 to \$8.70 (Table 4). The 1985-86 average pelt prices reflect continued instability in the wild fur market due to high overseas interest rates and the high value of the U.S. dollar on the world market. After a period of greatly inflated pelt prices in the late 1970's, the market values for most North American wild furs have apparently stabilized at a more realistic level. As a whole, the prices paid for all major species in Illinois remain good.

Distribution of Harvest Among Fur-takers

The distribution of the fur catch between hunters and trappers is traditionally a source of controversy. In addition, this aspect of the annual harvest is potentially important in the establishment of sound regulations and the evaluation of management programs. During the 1985-86 season, the percentage of animals harvested by hunters was monitored for the raccoon as part of certain furhouse studies in Federal Aid Project W-49-R-33. Also, the present survey

requested licensed fur buyers to estimate the portion of pelts purchased from hunters for the six furbearers that could be legally harvested by hunting and trapping methods.

The percentage of total harvest taken by hunters for species which may be hunted or trapped under current regulations ranged from 3.6% for striped skunk to 77.4% for coyote (Table 5). By applying the estimates from furhouse investigations and fur buyer estimates for canids and skunks to the 1985-86 harvest figures, the number of pelts taken by hunters was estimated to be 149,648 or approximately 35.3% of the total harvest for the year. As stated earlier, there were an estimated 33,348 raccoon hunters and 9,547 licensed trappers during the 1985-86 season. Excluding fox hunters, coyote hunters, opossum hunters, and canid chasers, fur hunters made up 77.7% of all Illinois fur-takers. These hunters accounted for 35.3% of all pelts taken.

The average fur hunter harvested 4.5 pelts valued at \$56.80 compared with the average trapper who took 28.7 pelts worth \$187.66. The distribution of harvest emphasizes the greater efficiency of trappers as well as the higher monetary rewards of trapping. The 1985-86 distribution values are similar to previous seasons (Hubert 1983, 1984, 1985b).

1975-1985 Fur Harvest Trends

Statewide furbearer harvest trend data for the years 1975 through 1985 are presented in Tables 6 through 11. During the 11-year period, total estimated pelt harvests based on fur buyer surveys ranged from 423,538 in 1985 to 948,392 in 1979, and averaged 683,907. No allowances for out-of-state pelt sales were made in 1975 or 1976. Out-of-state sales adjustments for the last nine seasons have averaged 4.5%. Since 1975, the harvests of most species have undergone major fluctuations.

Deer Hide Purchases

During the 1985-86 season, licensed fur buyers were requested to report the number of white-tailed deer (*Odocoileus virginianus*) hides that they bought from hunters. Purchases totaled an estimated 6,150 skins. Hubert (1985b) reported Illinois fur buyers purchased 7,445 deerskins in 1984-85. The average price paid in 1985-86 was \$2.75, so the total value to hunters was \$16,912.50. Since the 1985 firearms deer harvest in Illinois was approximately 30,000, less than 25% of the hides taken were sold. However, it is likely that many of the unsold skins are retained for personal use rather than discarded.

History of Striped Skunk Harvest Regulations

The striped skunk was first afforded protection by state statute in 1915 (Table 12). Prior to that year no regulations which specifically mentioned skunks existed in Illinois. The first restricted skunk harvest season was held from 1 November 1915 through 31 March 1916. Subsequent hunting and trapping seasons have ranged from 0 to 361 days. No skunk bag limits have ever existed. Overall, striped skunk harvest regulations have been relatively conservative. The closed hunting season in 1976-77 was due to an administrative error rather than a perceived need to protect skunks. The continuous open hunting season initiated in 1982 was instituted in an effort to alleviate public concern during a rabies

epidemic as well as eliminated the need to issue certain nuisance animal removal permits.

RECOMMENDATIONS:

This investigation provides the only source of harvest and value data for all 10 open season species of furbearers. The information serves as a base for assessment of population trends and regulatory management. The fur harvest survey should be continued.

No alterations in the length or timing of the current furbearer seasons or management zones are recommended based on the data contained in this report. The maintenance of stable seasons and zones permits more realistic year to year comparisons of harvest information and associated biological data are easier to interpret. However, additional recommendations for harvest regulations are contained in the job reports for certain related furbearer studies. Those recommendations should also be considered.

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_____. 1986c. Opossum investigations. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-33, Study X, Jobs 1 and 2. In preparation.

_____. 1986d. Striped skunk road-kill survey. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-33, Study XI, Job 1. 16pp.

DATA AND REPORTS:

Original and related reports in this investigation are on file in the Division of Wildlife Resources office, Illinois Department of Conservation, Springfield, Illinois 62706.

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Table 1. Illinois fur-bearing mammal season for 1985-86.

Species	^a Hunting seasons		Trapping seasons	
	Northern zone	Southern zone	Northern zone	Southern zone
Muskrat, Mink, Weasel	Closed	Closed	13 Nov-29 Dec	25 Nov- 8 Jan
Raccoon, Opossum	13 Nov-13 Jan	25 Nov-23 Jan	13 Nov-29 Dec	25 Nov- 8 Jan
Striped skunk	Continuous open season		13 Nov-29 Dec	25 Nov- 8 Jan
Beaver	Closed	Closed	13 Nov-28 Feb	25 Nov-28 Feb
Red fox, Gray fox	25 Nov-31 Jan	25 Nov-31 Jan	25 Nov-29 Dec	25 Nov- 8 Jan
Coyote	Continuous open season		25 Nov-29 Dec	25 Nov- 8 Jan

^a

Raccoon, opossum, and striped skunk hunting closed 24 hrs. on 15 and 16 Nov. and 13 and 14 Dec. and until 6PM on 17 Nov. and 15 Dec. during firearms deer season. Red fox and gray fox hunting closed 24 hrs. on 13 and 14 Dec. and until 6PM on 15 Dec. during firearms deer season. Coyote hunting closed 24 hrs. on 15 and 16 Nov. and 13 and 14 Dec. and until 6PM on 17 Nov. and 15 Dec. during firearms deer season except to those individuals possessing unfilled firearm deer permits.

^b

Those portions of Jo Daviess, Carroll, Whiteside, and Rock Island counties lying west of Illinois RT. 84 and US Rt. 20, from Interstate-80 north to the Wisconsin line were open to beaver trapping from 13 Nov.-29 Dec. 1985 only.

Table 2. Summary of resident fur buyer permits issued in Illinois for the 1985-86 season.

Wildlife management unit	Number of individual permittees	License type	
		Retail	Wholesale
Northwest Hills	20 (9.7) ^a	20	1
Northeast Moraine	16 (7.8)	11	5
Mississippi Border-North	12 (5.8)	10	2
Mississippi Border-South	19 (9.2)	14	5
Western Prairie/Forest	25 (12.1)	22	3
Central Sand Prairie	3 (1.5)	3	0
Grand Prairie	53 (25.7)	39	15
Southern Plain	42 (20.4)	32	10
Wabash Border	14 (6.8)	13	2
Shawnee Hills	2 (1.0)	1	1
Totals	206 (100.0)	165	44

^a Numbers in parentheses are percentages of statewide total.

Table 3. Composition of estimated fur harvest in Illinois and value to fur-takers during 1985-86 season.

Species	^a Total pelts		Total value	
	Number	Percent	Dollars	Percent
Muskrat	170,025	40.14	\$ 425,062.50	11.53
Mink	10,021	2.37	147,308.70	4.00
Raccoon	206,278	48.70	2,846,636.40	77.23
Opossum	17,633	4.16	16,751.35	0.46
Red fox	6,240	1.47	109,512.00	2.97
Gray fox	2,757	0.65	44,525.55	1.21
Beaver	3,857	0.91	36,448.65	0.99
Striped skunk	358	0.09	895.00	0.02
Weasel	22	0.01	9.90	-
Coyote	6,347	1.50	58,709.75	1.59
Totals	423,538	100.00	\$3,685,859.80	100.00

^a Includes 4.0% allowance for out-of-state pelt sales.

Table 4. Comparative fur harvest data for Illinois, 1984-85 vs. 1985-86.

Species	Number of pelts taken		Change in harvest from 1984-85	Average pelt price per pelt		Total value to fur-takers (dollars)		Change in value from 1984-85 (dollars)	
	1984-85 ^a	1985-86 ^b		1984-85	1985-86	1984-85	1985-86	1984-85	1985-86
Muskrat	225,629	170,025	-55,604 (-24.6)	\$3.55	\$2.50	800,982.95	425,062.50	-375,920.45 (-46.9)	
Mink	18,068	10,021	-8,047 (-44.5)	\$16.60	\$14.70	299,928.80	147,308.70	-152,620.10 (-50.9)	
Raccoon	269,991	206,278	-63,713 (-23.6)	\$17.25	\$13.80	4,657,344.75	2,846,636.40	-1,810,708.35 (-38.9)	
Opossum	28,204	17,633	-10,571 (-37.5)	\$0.95	\$0.95	26,793.80	16,751.35	-10,042.45 (-37.5)	
Red fox	8,835	6,240	-2,595 (-29.4)	\$27.20	\$17.55	240,312.00	109,512.00	-130,800.00 (-54.4)	
Gray fox	3,902	2,757	-1,145 (-29.3)	\$24.10	\$16.15	94,038.20	44,525.55	-49,512.65 (-52.7)	
Beaver	3,683	3,857	+174 (+4.7)	\$6.80	\$9.45	25,044.40	36,448.65	+11,404.25 (+45.5)	
Striped skunk	232	358	+126 (+54.3)	\$1.05	\$2.50	243.60	895.00	+651.40(+267.4)	
Weasel	37	22	-15 (-40.5)	\$0.55	\$0.45	20.35	9.90	-10.45 (-51.4)	
Coyote	6,847	6,347	-500 (-7.3)	\$8.30	\$9.25	56,830.10	58,709.75	+1,879.65 (+3.3)	
Totals	565,428	423,538	-141,890 (-25.1)	\bar{x} = \$10.95	\bar{x} = \$8.70	6,201,538.95	3,685,859.80	-2,515,679.15 (-40.6)	

^a Includes 4.8% allowance for out-of-state sales.

^b Includes 4.0% allowance for out-of-state sales.

^c Numbers in parentheses indicate percent change between years.

Table 5. Estimated percentage of annual harvest taken by hunters for selected furbearers in Illinois, 1985-86.

Species	<u>Estimated percentage of harvest taken by hunters</u>	
	Furhouse studies	Fur buyer estimates ^a
Raccoon	62.3 (Hubert 1986b) ^b	66.4
Opossum	70.9 (Hubert 1986c)	42.6
Red fox	-	40.7
Gray fox	-	42.4
Striped skunk	-	3.6
Coyote	-	77.4

^a Based on present study.

^b Authority listed in parentheses.

Table 6. Muskrat, mink, and weasel trapping seasons, harvests, and pelt price data for Illinois, 1975-1985.

Year	Season opening		Estimated			Average price		
	date (season length in days)		harvest		per pelt (dollars)			
	Northern zone	Southern zone	Muskrat	Mink	Weasel	Muskrat	Mink	Weasel
1975	8 Nov (69)	15 Nov (70)	445,737	18,009	181	2.90	6.00	0.50
1976	13 Nov (55)	20 Nov (55)	256,315	14,253	311	4.44	13.95	0.54
1977	15 Nov (45)	25 Nov (45)	300,314	12,910	147	5.10	13.20	0.60
1978	15 Nov (45)	25 Nov (45)	422,354	19,814	147	5.00	15.20	0.65
1979	10 Nov (30)	20 Nov (30)	460,674	22,971	145	6.35	20.15	0.50
1980	15 Nov (45)	25 Nov (45)	421,585	26,607	85	6.50	18.90	0.60
1981	15 Nov (45)	25 Nov (45)	325,415	24,478	53	4.30	17.45	0.50
1982	15 Nov (45)	25 Nov (45)	297,872	17,768	74	2.75	13.90	0.50
1983	15 Nov (45)	25 Nov (45)	248,146	16,056	60	3.15	15.15	0.65
1984	13 Nov (47)	25 Nov (45)	225,629	18,068	37	3.55	16.60	0.55
1985	13 Nov (47)	25 Nov (45)	170,025	10,021	22	2.50	14.70	0.45

Table 7. Beaver trapping season, harvests, and pelt price data for Illinois, 1975-1985.

Year	Season opening date (season length in days)		Estimated harvest	Average price per pelt (dollars)
	Northern zone	Southern zone		
1975	6 Dec (85)	6 Dec (85)	2,337	4.50
1976	18 Dec (80)	18 Dec (80)	1,548	7.00
1977	15 Nov (60)	25 Nov (60)	2,425	6.60
1978	15 Nov (90)	25 Nov (90)	3,386	7.25
1979	10 Nov (111)	20 Nov (101)	7,345	14.40
1980	15 Nov (106)	25 Nov (96)	7,338	10.60
1981	15 Nov (106)	25 Nov (96)	4,145	6.40
1982	15 Nov (106)	25 Nov (96)	2,517	4.95
1983	15 Nov (106)	25 Nov (96)	2,742	5.45
1984	13 Nov (108)	25 Nov (96)	3,683	6.80
1985	13 Nov (108)	25 Nov (96)	3,857	9.45

Table 8. Raccoon and opossum hunting and trapping season, harvest and pelt price data for Illinois, 1975-1985.

Year	Hunting season opening date (season length in days) ^a		Trapping season opening date (season length in days)		Estimated harvest		Average price per pelt (dollars)	
	Northern zone	Southern zone	Northern zone	Southern zone	Raccoon	Opossum	Raccoon	Opossum
1975	8 Nov (63)	15 Nov (64)	8 Nov (69)	15 Nov (70)	310,593	49,874	14.00	1.10
1976	13 Nov (54)	13 Nov (64)	13 Nov (55)	20 Nov (55)	187,377	42,153	17.17	1.21
1977	15 Nov (60)	25 Nov (60)	15 Nov (45)	25 Nov (45)	237,315	46,198	18.00	2.05
1978	15 Nov (60)	25 Nov (60)	15 Nov (45)	25 Nov (45)	292,728	25,097	27.25	2.65
1979	10 Nov (34)	20 Nov (37)	10 Nov (30)	20 Nov (30)	381,006	38,626	25.50	3.35
1980	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	314,777	46,710	19.40	1.45
1981	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	314,963	55,729	22.50	1.05
1982	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	292,189	35,548	14.55	0.95
1983	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	203,633	22,289	13.15	0.85
1984	13 Nov (58)	25 Nov (58)	13 Nov (47)	25 Nov (45)	269,991	28,204	17.25	0.95
1985	13 Nov (58)	25 Nov (58)	13 Nov (47)	25 Nov (45)	206,278	17,633	13.80	0.95

^a Hunting season closed during firearms deer season.

Table 9. Red and gray fox hunting and trapping season, harvest, and pelt price data for Illinois, 1975-1985.

Year	Hunting season opening date (season length in days) ^a		Trapping season opening date (season length in days)		Estimated harvest		Average price per pelt (dollars)	
	Northern zone	Southern zone	Northern zone	Southern zone	Red fox	Gray fox	Red fox	Gray fox
1975	8 Nov (63)	15 Nov (64)	8 Nov (69)	15 Nov (70)	11,247	7,132	34.00	16.00
1976	20 Dec (45)	17 Nov (52)	27 Nov (41)	4 Dec (41)	7,206	6,166	45.61	27.67
1977	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	9,715	9,086	47.45	31.05
1978	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	13,582	9,525	61.50	42.95
1979	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	14,136	10,547	48.40	43.80
1980	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	13,965	8,716	44.80	36.40
1981	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	13,533	7,649	46.75	28.75
1982	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	9,780	5,943	30.40	26.35
1983	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	8,719	4,152	30.90	27.35
1984	25 Nov (65)	25 Nov (65)	25 Nov (35)	25 Nov (45)	8,835	3,902	27.20	24.10
1985	25 Nov (65)	25 Nov (65)	25 Nov (35)	25 Nov (45)	6,240	2,757	17.55	16.15

^a Hunting season closed during firearms deer season.

Table 10. Striped skunk hunting and trapping seasons, harvest, and pelt price data for Illinois, 1975-1985.

Year	Hunting season opening date (season length in days) ^a		Trapping season opening date (season length in days)		Estimated harvest	Average price per pelt (dollars)
	Northern zone	Southern zone	Northern zone	Southern zone		
1975	8 Nov (63)	15 Nov (64)	8 Nov (69)	15 Nov (70)	-	1.00
1976	Closed	Closed	13 Nov (55)	20 Nov (55)	821	2.25
1977	15 Nov (60)	25 Nov (60)	15 Nov (45)	25 Nov (45)	1,503	2.20
1978	15 Nov (60)	25 Nov (60)	15 Nov (45)	25 Nov (45)	1,633	2.55
1979	10 Nov (34)	20 Nov (37)	10 Nov (30)	20 Nov (30)	3,111	2.60
1980	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	1,625	2.00
1981	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	840	2.15
1982	Continuous (361)	Continuous (361)	15 Nov (45)	25 Nov (45)	341	1.50
1983	Continuous (361)	Continuous (361)	15 Nov (45)	25 Nov (45)	137	1.55
1984	Continuous (361)	Continuous (361)	13 Nov (47)	25 Nov (45)	232	1.05
1985	Continuous (361)	Continuous (361)	13 Nov (47)	25 Nov (45)	358	2.50

^a Hunting season closed during firearms deer season.

Table 11. Coyote hunting and trapping seasons, harvests, and pelt price data for Illinois, 1975-1985.

Year	Hunting season opening date (season length in days) ^a		Trapping season opening date (season length in days)		Estimated harvest	Average price per pelt (dollars)
	Statewide		Northern zone	Southern zone		
1975	1 Sep (175)		8 Nov (69)	15 Nov (70)	2,833	8.00
1976	1 Sep (175)		27 Nov (41)	4 Dec (41)	3,882	16.07
1977	1 Sep (175)		1 Sep (45) ^b 30 Nov (30)	1 Sep (45) ^b 30 Nov (30)	7,678	16.75
1978	1 Sep (175)		30 Nov (30)	30 Nov (30)	9,891	31.35
1979	Continuous (359)		30 Nov (30)	30 Nov (30)	9,831	22.85
1980	Continuous (359)		30 Nov (30)	30 Nov (30)	8,412	19.25
1981	Continuous (359)		30 Nov (30)	30 Nov (30)	10,390	24.45
1982	Continuous (359)		30 Nov (30)	30 Nov (30)	8,180	13.85
1983	Continuous (359)		30 Nov (30)	30 Nov (30)	7,289	9.40
1984	Continuous (359)		25 Nov (35)	25 Nov (45)	6,847	8.30
1985	Continuous (365)		25 Nov (35)	25 Nov (45)	6,347	9.25

^a Hunting season closed during firearms deer season except in 1985 when holders of unfilled firearm deer permits could harvest coyotes.

^b Split trapping season; season total length = 75 days.

Table 12. Striped skunk hunting and trapping regulations in Illinois, 1915-1985.

Season	Zone ^a	Season length (days)		Special regulations
		Hunting	Trapping	
1915-16	Statewide	1 Nov-31 Mar(152)	1 Nov-31 Mar(152)	
1916-17 through 1918-19	Statewide	1 Nov-31 Mar(151)	1 Nov-31 Mar(151)	
1919-20	Statewide	1 Nov-15 Mar(136)	1 Nov-15 Mar(136)	
1920-21 through 1922-23	Statewide	1 Nov-15 Mar(135)	1 Nov-15 Mar(135)	
1923-24	Northern	1 Nov-15 Feb(107)	1 Nov-15 Feb(107)	
through 1932-33	Central	15 Nov- 1 Feb (79)	15 Nov- 1 Feb (79)	
	Southern	15 Nov-15 Jan (62)	15 Nov-15 Jan (62)	
1933-34	Northern	15 Nov-15 Mar(121)	15 Nov-15 Mar(121)	
through 1934-35	Central	1 Dec- 1 Feb (63)	1 Dec- 1 Feb (63)	
	Southern	1 Dec-15 Jan (46)	1 Dec-15 Jan (46)	
1935-36	Northern	15 Nov-15 Mar(122)	15 Nov-15 Mar(122)	
	Central	1 Dec- 1 Feb (63)	1 Dec- 1 Feb (63)	
	Southern	1 Dec-15 Jan (46)	1 Dec-15 Jan (46)	
1936-37	Northern	15 Nov-15 Mar(121)	15 Nov-15 Mar(121)	
	Central	1 Dec- 1 Feb (63)	1 Dec- 1 Feb (63)	
	Southern	1 Dec-15 Jan (46)	1 Dec-15 Jan (46)	
1937-38	Northern	15 Nov-31 Jan (78)	15 Nov-31 Jan (78)	
through 1938-39	Central	15 Nov-15 Jan (62)	15 Nov-15 Jan (62)	
	Southern	15 Nov-15 Jan (62)	15 Nov-15 Jan (62)	
1939-40	Northern	15 Nov-31 Jan (78)	15 Nov-31 Jan (78)	
through 1942-43	Central	15 Nov-15 Jan (62)	15 Nov-15 Jan (62)	
	Southern	1 Dec-15 Jan (46)	1 Dec-15 Jan (46)	
1943-44 through 1944-45	Statewide	15 Nov-31 Jan (78)	15 Nov-31 Jan (78)	
1945-46 through 1948-49	Statewide	15 Nov-15 Jan (62)	15 Nov-15 Jan (62)	
1949-50 through 1950-51	Statewide	1 Dec-31 Jan (62)	1 Dec-31 Jan (62)	
1951-52 through 1954-55	Statewide	15 Nov-15 Jan (62)	15 Nov-15 Jan (62)	

Table 12. Continued.

Season	Zone ^a	Season length (days)		Special regulations
		Hunting	Trapping	
1955-56 through 1958-59	Northern Southern	1 Nov-15 Jan (76) 15 Nov-15 Jan (62)	15 Nov-31 Dec (47) 1 Dec-15 Jan (46)	
1959-60	Northern Southern	15 Oct-15 Jan (93) 1 Nov-15 Jan (76)	15 Nov-31 Dec (47) 25 Nov-15 Jan (52)	
1960-61	Northern Southern	25 Oct-31 Jan (98) 1 Nov-31 Jan (92)	15 Nov-31 Dec (47) 25 Nov-15 Jan (52)	
1961-62 through 1962-63	Northern Southern	1 Nov-31 Jan (92) 15 Nov-31 Jan (78)	20 Nov-31 Dec (42) 1 Dec-15 Jan (46)	
1963-64	Northern Southern	15 Nov-31 Jan (75) 15 Nov-31 Jan (75)	20 Nov-31 Dec (42) 25 Nov-10 Jan (47)	Hunting season closed during deer season (6 days)
1964-65	Northern Southern	5 Nov-31 Jan (82) 5 Nov-31 Jan (82)	20 Nov-31 Dec (42) 25 Nov-10 Jan (47)	Hunting season closed during deer season (6 days)
1965-66 through 1966-67	Northern Southern	10 Nov-31 Jan (77) 10 Nov-31 Jan (77)	15 Nov-20 Dec (36) 25 Nov- 5 Jan (42)	Hunting season closed during deer season (6 days)
1967-68	Northern Southern	16 Nov-31 Jan (77) 16 Nov-31 Jan (77)	16 Nov-31 Dec (46) 25 Nov- 5 Jan (42)	
1968-69	Northern Southern	1 Nov-31 Jan (86) 1 Nov-31 Jan (86)	16 Nov-31 Dec (46) 25 Nov- 5 Jan (42)	Hunting season closed during deer season (6 days)
1969-70	Northern Southern	1 Nov-31 Jan (86) 1 Nov-31 Jan (86)	15 Nov-31 Dec (47) 25 Nov- 5 Jan (42)	Hunting season closed during deer season (6 days)
1970-71	Northern Southern	1 Nov-31 Jan (86) 1 Nov-31 Jan (86)	16 Nov-31 Dec (46) 25 Nov- 5 Jan (42)	Hunting season closed during deer season (6 days)
1971-72	Northern Southern	1 Nov-31 Jan (86) 1 Nov-31 Jan (86)	15 Nov-31 Dec (47) 24 Nov- 4 Jan (42)	Hunting season closed during deer season (6 days)
1972-73	Statewide	11 Nov-31 Jan (76)	11 Nov-31 Jan (82)	Hunting season closed during deer season (6 days)
1973-74	Statewide	10 Nov-31 Jan (77)	10 Nov-31 Jan (83)	Hunting season closed during deer season (6 days)

Table 12. Continued.

Season	Zone ^a	Season length (days)		Special regulations
		Hunting	Trapping	
1974-75	Statewide	9 Nov-31 Jan (78)	9 Nov-31 Jan (84)	Hunting season closed during deer season (6 days)
1975-76	Northern	8 Nov-15 Jan (63)	8 Nov-15 Jan (69)	Hunting season closed during deer season (6 days)
	Southern	15 Nov-23 Jan (64)	15 Nov-23 Jan (70)	
1976-77	Northern	Closed	13 Nov- 6 Jan (55)	
	Southern	Closed	20 Nov-13 Jan (55)	
1977-78 through 1978-79	Northern	15 Nov-19 Jan (60)	15 Nov-29 Dec (45)	Hunting season closed during deer season (6 days)
	Southern	25 Nov-26 Jan (60)	25 Nov- 8 Jan (45)	
1979-80	Northern	10 Nov-19 Dec (34)	10 Nov- 9 Dec (30)	Hunting season closed during deer season (6 days)
	Southern	20 Nov-29 Dec (37)	20 Nov-19 Dec (30)	
1980-81 through 1981-82	Northern	15 Nov-13 Jan (56)	15 Nov-29 Dec (45)	Hunting season closed during deer season (4 days)
	Southern	25 Nov-23 Jan (58)	25 Nov- 8 Jan (45)	
1982-83 through 1983-84	Northern	Continuous open(361)	15 Nov-29 Dec (45)	Hunting season closed during deer season (4 days)
	Southern	Continuous open(361)	25 Nov- 8 Jan (45)	
1984-85 through 1985-86	Northern	Continuous open(361)	13 Nov-29 Dec (47)	Hunting season closed during deer season (4 days)
	Southern	Continuous open(361)	25 Nov- 8 Jan (45)	

^a

From 1923-24 through 1942-43 the northern zone included the area north of the southern boundaries of Henderson, Warren, Knox, Peoria, Woodford, Livingston, Kankakee, and Iroquois counties; the southern zone included the area south of the northern boundaries of Madison, Bond, Fayette, Effingham, Jasper, and Crawford counties; and the central zone included the remainder of the state.

From 1955-56 through 1964-65 the northern zone included the area north of the southern boundaries of Pike, Greene, Macoupin, Montgomery, Shelby, Cumberland, and Clark counties.

From 1965-66 through 1972-73 and 1979-80 through 1985-86 the northern zone included the area north of US Route 36.

From 1975-76 through 1978-79 the northern zone included the area north of US Route 36 from the Indiana state line to Springfield, Route 29 from Springfield to Pekin, and Route 9 from Pekin to Dallas City, then due west to the Mississippi River.

ILLINOIS DEPARTMENT OF CONSERVATION
DIVISION OF FISH AND WILDLIFE RESOURCES
FURBEARER PROGRAM

REPORT OF RAW FURS PURCHASED

SEASON OF 1985-1986

WMU (FOR OFFICE USE)

FUR BUYER LICENSE NUMBER(S) () RESIDENT () NON-RESIDENT

	MUSKRAT	MINK	RACCOON	OPOSSUM	RED FOX	GRAY FOX	BEAVER	SKUNK	WEASEL	COYOTE	DEER	OTHER (LIST)
1. RAW FURS BOUGHT FROM ILLINOIS HUNTERS AND TRAPPERS												
2. RAW FURS BOUGHT FROM OTHER ILLINOIS FUR BUYERS												
3. RAW FURS BOUGHT FROM OUTSIDE OF ILLINOIS												

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS RACCOONS WERE BOUGHT FROM HUNTERS? % SIGNED _____

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS OPOSSUMS WERE BOUGHT FROM HUNTERS? % FIRM NAME _____

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS RED FOXES WERE BOUGHT FROM HUNTERS? % ADDRESS _____

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS GRAY FOXES WERE BOUGHT FROM HUNTERS? % DATE _____

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS SKUNKS WERE BOUGHT FROM HUNTERS? % ZIP CODE _____

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS COYOTES WERE BOUGHT FROM HUNTERS? %

Figure 1. Report of raw furs purchased form used for the 1985-86 season.



Figure 2. Furbearer management zones for the 1985-86 season.

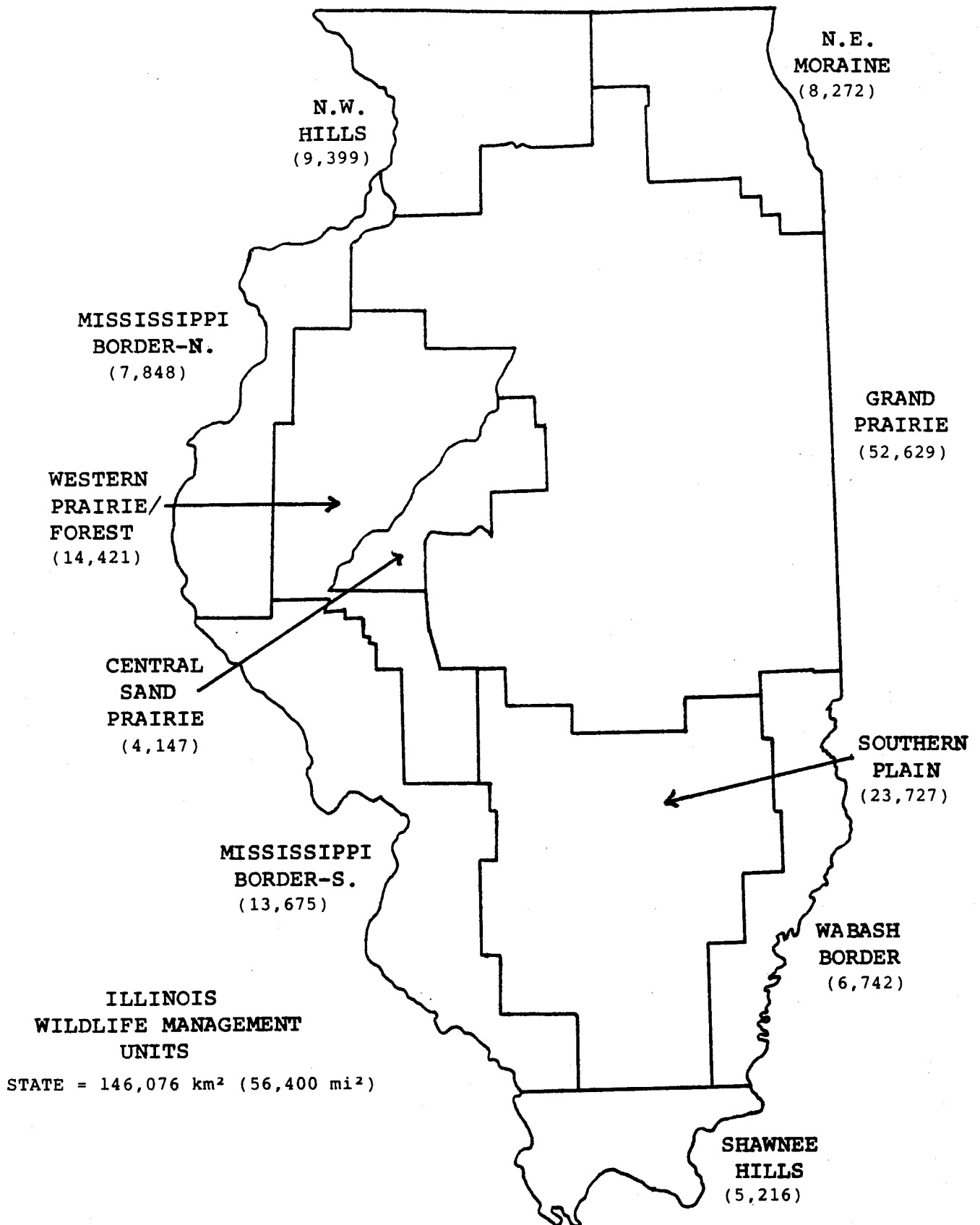


Figure 3. Area (km²) of wildlife management units in Illinois.

UNIVERSITY OF ILLINOIS-URBANA
635 25986 C001
FUR HANNEY SPRINGFIELD, IL
1985/88



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